

DuPont™ Temprion™ EIF X Series

Electrically Insulating Film

Description

DuPont™ Temprion™ EIF X Series is a flexible laminate film comprising an electrically insulating, puncture resistant Kapton® polyimide core coated with a pressure sensitive, thermally conductive adhesive on one or both sides.

Temprion™ EIF features Kapton® MT or Kapton® MT+ polyimide as a carrier to achieve best-in-class thermal performance for an electrically insulating film, where electrically isolating components within a package is critical to operation.

Applications

- Thermal Interface Material
- Power Electronics
- CPU/GPU
- Battery Attachment

Features

- Low thermal resistance
- High puncture resistance
- Minimal application pressure
- UL 94 V-0 flammability rating
- RoHS Compliance

Table 1 - Typical Properties of DuPont™ Temprion™ EIF X Series Electrically Insulating Film

Property	XA037037D037	XA037037S000	Test Method
Thickness, mil (mm)	4.5 (0.11)	3.0 (0.076)	ASTM D374
Reinforcement Carrier	Kapton® MT+	Kapton® MT+	N/A
Continuous Use Temp, °F (°C)	-4 to +257 (-20 to +125)		N/A
Thermal Conductivity, W/m·K	0.7	0.7	ASTM D5470
Thermal Impedance, °C·in ² /W (°C·cm ² /W) @ 45 psi (0.3 MPa)	0.24 (1.54)		ASTM D5470
Breakdown Voltage, Vac	7.9	7.9	ASTM D149
Volume Resistivity, Ω·cm	> 10 ¹⁵		ASTM D257
90° Peel Strength @ RT, against smooth Al, 24 hr dwell, lb/in width (N/cm width)	1.1 (1.9)	1.1 (1.9)	ASTM D3330
Flammability	V-0		UL94
RoHS Compliant	Yes		N/A



For more information on DuPont™ Temprion™ or other DuPont products, please visit our website.

electronics.dupont.com

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CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102-5 and "DuPont Policy Regarding Medical Applications" H-50103-5.

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